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ABSTRACT

The Thomas Jefferson High School for Science and Technology (Fairfax County, Virginia) offers a comprehensive college preparatory program emphasizing the sciences, mathematics, and technology. The school serves students selected on the basis of aptitude and interest in the biological, physical, mathematical, and computer sciences, and who intend to persue college preparation in the sciences, engineering or related fields. In order to assess various opinions concerning the first year of the school's existence, parents, students, faculty, and staff were asked to respond to separate survey instruments. This document provides the results of those surveys, which tend to be very positive. Data reflects strong positive opinion relative to a challenging curriculum and coursework, a strong academic climate, intellectually stimulating experiences, and feelings that students had learned a great deal during the year. In addition, faculty were comfortable with their role at the school, and students stated that they would encourage others to participate. Some concern was shown in relation to the travel time to and from school, and the value of the technology laboratories. The study instruments are appended. (TW)

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THE THOMAS JEFFERSON HIGH SCHOOL FOR SCIENCE AND TECHNOLOGY

Report #3

THE FIRST YEAR EXPERIENCE
REACTIONS OF FACULTY, STUDENTS, & PARENTS

Achievements and Awards

U.S. DEPARTMENT OF EDUCATION
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APPENDIX A

Parent/Guardian Questionnaire (Freshman Students)
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Senior Student Questionnaire
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EXECUTIVE SUMMARY

The first year (school year 1985-86) of the Thomas Jefferson High School for Science and Technology's existence received much attention and much scrutiny. Many innovations were incorporated into the plan for the school -- innovations in terms of local programs and in terms of initiatives not previously seen anywhere in the United States. The level of attention and scrutiny is best demonstrated by the number of very positive news articles concerning the school published during this time frame; invitations to present the school's concept and plan at several national events including the National Governor's Association's Task Force on Technology in Education, the National Science Foundation's Task Force on Women and Minorities in Engineering, the American Society for Curriculum Development, and the National Association of Secondary School Principals; visitations to the school by over 100 groups representing nearly one-half of the states and six foreign countries; and a visit to the school by President Reagan and Secretary of Education William Bennett.

In order to more accurately assess opinion concerning the first year experience parents, students, faculty, and staff were asked to respond to separate survey instruments. Results were summarized around the distinguishing and unique characteristics of the school and around the program and instructional process innovations incorporated into the school's creation.

Results were very positive. Data reflected strong positive opinion relative to challenging curriculum and coursework, a strong academic climate, intellectually stimulating experiences, and feelings that students had learned a great deal during the year. The admissions process had produced the right student body, the program was viewed as valuable and appropriate for the students, faculty were comfortable with their role at the school, and students would encourage others to consider participation. In general, the results indicated that in virtually every area of interest, the plans, organization, program and process had hit the mark. The first year had demonstrated considerable success and the potential for continued success was very high.

Although most data reflected strong support and encouragement for the ideas and plans implemented at the school for science and technology, transportation was a strong concern. However, many students reported travel time as an asset to the program allowing opportunity for homework completion, developing friendships, and study time. The value of the technology laboratories, although not fully integrated by virtue of the presence of so few students this first year, was supported by the majority of the respondents. However, the number of respondents who were uncertain about the value of the laboratories was significant enough to increase the efforts to assure the appropriate and effective use of these facilities.

INTRODUCTION

The Thomas Jefferson High School for Science and Technology is a unique Fairfax County public school offering a comprehensive college preparatory program emphasizing the sciences, mathematics, and technology. The school serves students selected on the basis of aptitude and interest in the biological, physical, mathematical, and computer sciences and who intend to pursue college preparation in the sciences, engineering, or related fields. The school opened with a freshman class of 400 in 1985. There are approximately 800 freshmen and sophomores at the school for the 1986-87 session. By 1988 there will be 1,600 students in grades 9-12.

The school is the result of a partnership of the private and public sectors created to improve and strengthen education in mathematics, science, and technology. Representatives from business and industry and staff of the Fairfax County Public Schools worked together in curriculum and facilities development for the school. The Fairfax County Public Schools Education Foundation, Inc., governed by chief executive officers of the local business community, has successfully raised business and industry support for the school including cash, equipment, training, and technical assistance for the school and its staff. To date, this contribution exceeds two million dollars.

As the Governor's School for Science and Technology in northern Virginia, the Thomas Jefferson High School for Science and Technology receives some funding from the Virginia Department of Education. The regional status of the school means that students residing in the participating northern Virginia school districts are eligible to apply for admission. School districts eligible to participate include the counties of Arlington, Fairfax, Loudoun, and Prince William; and the cities of Alexandria, Falls Church, Manassas, and Manassas Park. Prior to application deadlines each year, the specified school districts announce their intention to participate or not to participate in the regional school.

Because the Thomas Jefferson High School for Science and Technology is a public school, no payment for tuition or transportation is made by students. Each school division participating in the regional school funds costs associated with attending the school. The tuition charge for 1985-86 was $4,985 per student; for the 1986-87 session the charge is $5,460. An extensive network of bus routes services the 900 square mile school boundary area. Each participating school division provides transportation for its students.

METHODOLOGY

In order to assess opinion concerning the first year experience (school year 1985-86) at The Thomas Jefferson High School for Science and Technology, several surveys were designed and distributed. Four groups were identified to provide opinions; specifically, freshmen science and technology students, senior experience students (a one-year special experience designed for seniors who otherwise had no opportunity to take advantage of the program or facilities), parents/guardians of freshmen, and faculty/staff. Copies of the instruments are contained in Appendix A, page 17.

The school for science and technology is distinguished by a number of specific characteristics unique to its program. This report is organized around these characteristics with statistics reported across the survey groups for items related to each characteristic. Following these data is a section describing the awards and other achievements realized by students and faculty over the period.

THE ADMISSIONS PROCESS/ELECTION TO APPLY AND PARTICIPATE

The school for science and technology selects its students via a competitive process. Any eligible student may apply for admission. Eligibility is generally determined by residence within the boundary of a participating school district and grade level. The surveys solicited opinion concerning the admissions process and the willingness of individuals to repeat the process if given a second opportunity. Respondents were also asked if there was an intention to return for another school year. A detailed analysis of the admissions process and its results are the topics of Report #2, The Admissions and Selection Process, which is available upon request.

Only five parents indicated that they expected their children not to return for the sophomore program. Five others were uncertain about continued participation. Summary data in percent positive responses are reflected in Table I.

Table I

Expectation to Return

Parents (N=181)	Freshmen Students (N=373)
94.5%	92.2%

Concerning the perceived value of the admissions experience, respondents were asked if they would repeat it if given the opportunity and if they would encourage others to apply. Parents agreed with both positions by large percentages. Students also expressed high levels of agreement. Freshmen were more in agreement than seniors. Table II reports these data.

Table II

Willingness to Repeat/Recommend the Program

Item	Parents (N=181)			Students					
				Freshmen (N=373)			Seniors (N=67)		
	%A	%DA	%UC	%A	%DA	%UC	%A	%DA	%UC
Would Apply Again	96.1	1.7	2.2	81.2	5.6	13.1	73.2	14.9	10.4
Would Encourage Others to Apply	93.4	1.7	5.0	73.7	7.8	18.5	62.7	16.4	19.4

A = Agree; DA = Disagree; UC = Uncertain

In regard to the admissions process for ninth grade students, the majority of the faculty (67.6%) agreed that the procedures used for selection had produced an appropriate student body. Six faculty disagreed (16.2%) and six were uncertain. No admissions process was initiated for senior experience students other than a requirement to have completed prerequisite coursework.

Parents and freshmen were asked to express their opinions about the admissions process as a disadvantage to electing to apply for the program. Table III presents these data.

Table III

The Admissions Process as a Disadvantage

	Parents (N=181)	Students (N=373)
Severe Disadvantage	0.0%	3.5%
Slight Disadvantage	1.7%	11.3%
No Disadvantage	93.9%	65.4%
Not Sure	3.9%	16.1%
No Response	0.6%	3.7%

Clearly the majority of respondents felt that the admissions process was not a disadvantage.

INSTRUCTIONAL PROGRAM

The school for science and technology initiated a unique instructional program during its first year. Content, method, scope, and sequence were all assessed and implemented consistent with a curriculum committee's recommendations for addressing the needs of students attending the school. Parents, faculty, and students were asked to react to several statements concerning the program. Table IV presents these data.

Table IV

Instructional Program

	% In Agreement			
	Students		Parents	Faculty
	S	F		
Strong Academic Climate Exists	70.1	85.0	96.1	94.6
Felt Challenged by Coursework	64.1	84.5	93.9	----
Regularly Challenged by Curriculum	61.2	76.4	87.3	91.9
Motivated to do Best Academically	40.3	54.4	74.6	83.8
Intellectually Stimulated	62.7	62.7	88.9	91.9
Adequately Prepared	62.7	46.9	76.8	81.1
Learned a Lot	68.7	85.3	94.4	----
Satisfactory Academic Progress	68.6	61.9	86.2	94.6
Require a Science Project	----	20.6	53.0	59.4
Optional Independent Research	55.2	72.9	55.3	40.5
Requirement to Enter Science Fair	----	8.8	29.8	21.6
Experience Was Valuable	79.1	87.1	98.9	94.6

S = Senior Experience Students (N=67)
F = Freshmen Science and Technology Students (N=373)
Parents (N=181)
Faculty (N=37)

The strength of the academic program was strongly endorsed by all four groups. The challenges of the curriculum and the coursework were also strongly supported. Students felt they had learned a lot during their experience, and their parents agreed with them. Academic progress was reported as satisfactory by all groups. Seniors felt less motivated to do their best academically than freshmen with only slightly more than one-half of the freshmen (54.5%) feeling that they were motivated to do their best.

Less than one-half of the freshmen (46.9%) agreed that they had been adequately prepared for the program at the school; however, 19.6% were uncertain about this statement. Most seniors (62.7%) felt that they were adequately prepared. Nearly 77% of the parents felt their children had been adequately prepared.

A majority of students (91.2%) felt entrance to science fairs should not be required with the majority of faculty (74.4%) and parents (70.2%) supporting this position. Few students (20.6%) felt that science projects should be required; however, the majority of parents (53%) and faculty (59.4%) felt otherwise.

Optional independent research was favored by the majority of both student groups (seniors 55.2%, freshmen 72.9%) but not supported by the majority of either parents (45.3%) or faculty (40.5%).

GRADUATION REQUIREMENTS

Requirements for graduation from the school for science and technology (25 credits) are greater in number and are different from those specified for other schools both within the Commonwealth of Virginia and Fairfax County. Parents, faculty, and students were asked to indicate preferences for increasing, decreasing, or keeping constant the current requirements in each discipline. Table V presents these data.

Table V

Graduation Requirements

	% Who Would Elect To								
	Increase			Decrease			Not Change		
	S	P	F	S	P	F	S	P	F
Electives	73.2	55.8	48.6	2.1	2.2	2.7	21.4	40.3	48.6
English	1.1	2.8	0.0	29.2	1.7	0.0	66.5	95.6	97.3
Science	3.8	5.0	2.7	11.8	5.5	5.4	81.2	89.0	86.5
Mathematics	4.8	7.7	2.7	8.6	1.7	2.7	84.2	90.6	89.2
Foreign Language	7.2	3.9	5.4	23.6	18.8	10.8	66.5	77.3	81.1
Social Studies	6.7	6.6	8.1	42.6	16.6	5.4	47.5	76.8	78.4
Technology	31.1	28.2	10.8	9.4	5.0	0.0	56.0	66.9	83.8
Fine Arts	26.5	22.1	18.9	15.3	6.6	8.1	54.7	71.3	67.6
Computer Science	17.4	36.5	2.7	14.7	1.7	2.7	64.6	61.9	89.2
Physical Education	8.8	11.6	13.5	23.6	13.3	5.4	64.3	75.1	75.7

Note: Percentages may not total 100 because of invalid and/or blank responses.

S = Students (N=373); P = Parents (N=181); F = Faculty (N=37)

In every area across all groups, the majority of the respondents indicated that no changes were needed in graduation requirements with the exception of 1) electives, where a strong opinion to increase requirements was provided; and 2) social studies where fewer than 50% of students selected no change. Elective requirements were considered too few by the majority of parents (55.8%) and students (73.2%). However, no support by any majority identified subject areas for decreased requirements in order to accommodate increased opportunity to enroll in electives. Agreement concerning decreasing require-

ments was not evident. Only small percentages of parents and faculty (from 0.0% to 18.8%) indicated reductions in any disciplines with both groups selecting foreign language by the largest numbers (18.8% and 10.8%, respectively). Students, on the other hand, would reduce the social studies requirement (42.6%), the English requirement (29.2%), and the foreign language and physical education requirements (23.6% each).

TECHNOLOGY LABORATORIES

The complement of technology laboratories at the school is the key distinguishing characteristic that sets the program apart from any other public high school facility. These laboratories occupy 24,000 square feet and represent ten distinct learning environments. For the school year under study, five laboratories were operational; specifically, Computer Systems, Energy and Engineering, Life Sciences and Biotechnology, and Telecommunications laboratories. Comment and opinion are, therefore, directed toward experiences in these five laboratories. Table VI reports these data.

Table VI

Technology Laboratories

	Freshmen (N=373)			Parents (N=181)			Faculty (N=37)			Seniors (N=67)		
	%A	%U	%DA	%A	%U	%DA	%A	%U	%DA	%A	%U	%DA
Are Important/ Asset	70.5	15.5	14.0	90.0	8.3	1.7	51.3	29.7	13.5	46.2	29.9	22.4
Enough Time Sched.	52.3	18.2	29.5	54.7	34.3	11.1	----	----	----	65.7	14.9	18.0
Time is About Right	43.9	25.2	30.8	----	----	----	32.4	56.8	10.8	46.3	28.4	23.8
Directly Related	36.2	31.1	32.7	63.5	31.5	5.0	27.0	21.6	48.6	35.8	17.9	44.8

Note: Percentages may not total 100 because of invalid and/or blank responses.

A = Agree; U = Undecided; DA = Disagree

The majority of students, parents, and faculty felt that the laboratories were important and were assets to the program. Parents, as a group, were the most convinced (90.0%), followed by freshmen students (70.5%), faculty (51.3%), and senior students (46.2%). Faculty (29.7%) and seniors (29.9%) expressed more skepticism than freshmen or parents, while no group strongly disagreed.

Table VI also reports data relevant to the issue of time spent in the technology laboratories. Greater than one-half of the students, both senior and freshman, and the parents felt that enough time was scheduled in the laboratories. However, in response to a similar question concerning the time in the laboratories fewer than one-half agreed with only a third of the faculty in agreement. The level of uncertainty was high on this question.

Parents felt strongly that activities in these laboratories should be directly related to specific instruction in science and mathematics (63.5%). Students and faculty disagreed, approximately one-third of each group supporting the statement.

As shown in Table VII, according to faculty, freshmen talked about the experiences in the Life Sciences and Biotechnology Laboratory most frequently. The faculty likewise supported this laboratory as the most appropriate for freshmen, and as best exemplifying the philosophy of the school. The telecommunications laboratory held the most potential for use across disciplines but was reported as least exemplifying the philosophy of the school and least appropriate for freshmen.

Both parent and freshmen groups selected the Life Sciences and Biotechnology Laboratory as most appropriate to their career choices and as best supporting their coursework. Seniors also selected this laboratory as most appropriate to career choice and the Computer Systems Laboratory as best supporting their coursework. Seniors enjoyed the Energy and Engineering Laboratory most and freshmen enjoyed the Materials Science laboratory most.

Table VII

Technology Laboratories

	CSL			EEL			LSB			MSL			TCL		
	S	P	F	S	P	F	S	P	F	S	P	F	S	P	F
Talked About Most	----	----	16.2	----	----	2.7	----	----	43.2	----	----	16.2	----	----	0.0
Most Appropriate to Subject	----	----	21.6	----	----	10.8	----	----	16.2	----	----	10.8	----	----	27.0
Best Exemplifies Philosophy	----	----	8.1	----	----	2.7	----	----	45.9	----	----	2.7	----	----	8.1
Least Exemplifies Philosophy	----	----	0.0	----	----	10.8	----	----	2.7	----	----	13.5	----	----	27.0
Most Appropriate for Freshmen	----	----	10.8	----	----	0.0	----	----	40.5	----	----	5.4	----	----	0.0
Least Appropriate for Freshmen	----	----	0.0	----	----	8.1	----	----	2.7	----	----	5.4	----	----	35.1
Most Appropriate to Career	21.7 **20.9**	27.1	----	20.1 **26.9**	17.7	----	33.0 **26.9**	38.7	----	8.3 **4.5**	6.6	----	5.9 **9.0**	5.0	----
Best Supported Coursework	17.4 **37.3**	24.3	----	3.5 **10.4**	2.8	----	66.0 **14.9**	60.8	----	5.4 **4.5**	8.8	----	1.1 **13.4**	0.6	----
Enjoyed Most	12.1 **20.9**	16.6	----	3.5 **23.9**	2.8	----	21.4 **10.4**	28.2	----	38.6 **14.9**	37.0	----	7.0 **10.4**	6.1	----
Enjoyed Least	16.6 **20.9**	19.3	----	19.0 **14.9**	16.6	----	14.2 **22.4**	12.7	----	8.0 **11.9**	10.5	----	37.0 **20.9**	30.9	----

Note: Percentages may not total 100 because of invalid and/or blank responses.

CSL = Computer Systems Lab; EEL = Energy & Engineering Lab; LSB = Life Science & Biotechnology Lab; MSL = Materials Sciences Lab; TCL = Telecommunications Lab

S = Students; P = Parents; F = Faculty

Bold Type = Seniors

ORGANIZATION OF THE SCHOOL DAY

The day at the school for science and technology is organized around a nine-period day (one period reserved for lunch and one period designated for student activities). All classes do not meet every day, and science laboratory and mathematics laboratory sections meet for two consecutive periods once weekly. The school day is longer for students and faculty than the conventional day at other high schools.

Table VIII reports the data displaying attitudes toward the organization of the day and its impact on other opportunities students may wish to pursue. Parents (75.7%) and faculty (83.8%) were strong in their agreement that the longer day was appropriate. Students were less supportive (40.5%) but agreed by greater than 50% with all of the basic principles of the organization; i.e., they felt that not meeting every class every day was correct; that these were not too many periods; that the activity period was a good idea; that double laboratory sessions were good ideas, etc. Students felt that the longer day restricted their ability to develop friendships and to complete homework; although parents felt less inclined to state these positions. All three groups agreed that students had adjusted well to the schedule.

Table VIII

Organization of the School Day

	In Agreement		
	Students	Parents	Faculty
Longer School Day is Appropriate	40.5	75.7	83.8
All Classes Should Meet Every Day	15.8	13.8	13.5
Too Many Periods Every Day	28.9	11.6	----
Activity Period is Good Idea	60.9	83.9	72.9
Activity Period Should be Last	58.5	67.4	48.6
Enough Time in Technology Labs	52.3	54.7	32.4
Double Period Biology Lab Good Idea	83.9	81.7	78.3
Double Period Mathematics Lab Good Idea	65.2	66.3	56.7
Time in Technology Labs About Right	43.9	----	----
Have Adjusted Well to Schedule	76.2	85.7	89.1
Enough Time to Make Friends	47.5	61.3	----
Enough Time for Homework	29.2	57.4	----
Willingly Participate in Activities	73.5	----	78.4
Class Size About Right	87.1	79.1	----
Blocking Math & Science is Good Idea	----	----	67.5
Blocking Social Studies & English is Good Idea	----	----	54.0

A second aspect of the organization of the school day about which opinions were sought related to other organizational options. Table IX reports these data.

Table IX

Options for Organizing the School Day

	% Choosing		
	Students	Parents	Faculty
Stay With Current Schedule	31.6	61.3	51.4
More Periods, Each of Shorter Duration	11.8	1.7	0.0
Fewer Periods, Each of Longer Duration	4.0	6.1	2.7
Some Longer Periods, Some Shorter	17.2	18.2	27.0
Some Other Arrangement	32.4	12.7	18.9
No Response	3.5	0.0	0.0

A majority of parents and faculty chose the current schedule as the best option. Students elected the "some other arrangement" category as the most desirable from the list of five choices by less than 1% over the current schedule option. One not on the list was "fewer periods each of shorter duration" which may have been the option these students sought, although fewer periods, each of longer duration was not a popular student choice.

DISADVANTAGES TO PARTICIPATION

In April 1984 a student survey was completed soliciting opinion about the planned opening of the school for science and technology. A part of this survey addressed reasons why students might elect not to attend. Of approximately 10,000 students who responded to this survey, close to 84% chose leaving friends as the greatest potential deterrent followed by the possibility of fewer electives (77%), fewer extracurricular activities (65%), and having to travel by bus over long distances (22%). The survey of the first class demonstrated that these factors did not continue to be strong deterrents to attend. The longer school day was selected as the greatest disadvantage (67.5%) followed by travel time (65.4% and 67.3%) and having to leave friends (62.2%). Travel time was the only category of disadvantages selected by over 50% of the parents. These data are presented in Table X.

Table X

Disadvantages to Attending

	Parents (N=181) Level of Disadvantage				Students (N=373) Level of Disadvantage			
	Severe	Slight	None	Not Sure	Severe	Slight	None	Not Sure
Travel Time to School	23.2	53.6	21.5	1.7	25.5	39.9	27.1	2.9
Travel Time From School	21.0	46.4	30.9	1.7	30.0	37.3	27.6	1.9
Number of Electives	2.8	25.4	63.0	8.3	16.9	33.2	31.4	15.5
Having to Leave Friends	5.5	37.0	51.9	5.5	22.3	39.9	29.2	5.4
Attending More Classes	2.2	14.4	77.9	5.5	11.8	30.0	47.7	6.7
Longer School Day	12.7	27.6	58.0	1.7	29.2	38.3	24.1	5.1
Increased Graduation Req.	2.8	9.9	85.1	2.2	4.0	22.8	62.7	7.8
Attending Technology Labs	1.1	2.2	93.4	3.3	3.5	8.6	73.5	11.5
Admissions Requirements	0.0	1.7	93.9	3.9	3.5	11.3	65.4	16.1
Required Activity Period	0.6	5.5	87.3	6.1	9.9	12.6	66.0	8.3
Time for Electives	8.3	30.4	50.8	8.8	25.2	30.8	30.0	9.9

Note: Percentages may not total 100 because of invalid and/or blank responses.

ROLE OF CHAIRPERSONS

The staffing proposals approved for the school's creation included a provision allowing department chairpersons for the departments of English, Science, Mathematics, Social Studies, Foreign Language, and Technology each with 50% teaching assignments. Policy for other high schools had limited chairpersons to four (English, Mathematics, Social Studies, and Science) with one period released time in addition to the planning period provided for all teachers. The role of the chairpersons at science and technology was expanded considerably to include responsibility for faculty selection, supervision, and evaluation and for program development and implementation.

Faculty were asked to react to these various roles in terms of increasing, decreasing, discontinuing, or leaving as it is the respective levels of responsibility. In every instance the majority of the faculty supported leaving the role and responsibility as it is currently defined. Table XI reports these data. The role gaining the most support for being decreased was the teaching responsibility (32.4%).

Table XI

Role of Chairpersons

	Leave As Is	Increase	Decrease	Discontinue	No Response
Faculty Evaluation	67.6	5.4	2.7	18.9	5.4
Faculty Supervision	56.8	10.8	8.1	18.9	5.4
Teaching Responsibility	51.4	10.8	32.4	0	5.4
Curriculum Development	62.2	8.1	13.5	10.8	5.4
Participation in Student Activities	51.4	8.1	8.1	16.2	16.2

SUPPORT/COOPERATION OF PERSONNEL

Table XII reports the opinions of the various groups relative to the support and cooperation received from the various sectors of the FCPS organization responsible for the school. The instruments requested reaction to statements that the support and cooperation had been effective. The level of agreement was high by each respective group concerning the support provided by the central administrator responsible for the school, the school's principal and administrative staff, the teachers, and counselors. The exception to this pattern was the student groups' opinion relative to the admissions staff. Students had little opportunity for direct contact with the admissions staff, a fact reflected by the level of uncertainty reported by students for this item.

Table XII

Support/Cooperation of Personnel

	Students			Parents			Faculty		
	% Agree	% Uncertain	% Disagree	% Agree	% Uncertain	% Disagree	% Agree	% Uncertain	%Disagree
Asst. Supt.	----	----	----	----	----	----	76.6	10.8	10.8
Prin. & Adm.	59.3	24.1	16.3	86.2	9.9	3.9	81.1	5.4	10.8
Teachers	68.9	16.9	13.6	77.3	16.6	6.1	----	----	----
Counselors	54.2	27.9	17.1	74.6	17.1	8.3	83.7	10.8	5.4
Admissions Staff	33.5	51.7	13.7	64.6	29.8	5.5	81.0	13.5	5.4

Note: Percentages may not total 100 because of invalid and/or blank responses.

OPINIONS ABOUT TEACHERS

Parents overwhelmingly agreed that faculty displayed a genuine interest in their children and that faculty had high expectations for their children's performance. Students agreed with the genuine interest statement but reflected higher disagreement and uncertainty about faculty expectations. Table XIII reports these data.

Table XIII

Opinions About Teachers

	Parents			Students		
	% Agree	% Uncertain	% Disagree	% Agree	% Uncertain	% Disagree
Genuinely Interested in Students	80.1	17.7	1.7	67.5	17.7	14.8
High Expectations of Students	71.2	16.6	12.1	--	--	--
Comfortable With Teachers' Expectations	--	--	--	44.6	28.4	26.6

OPINIONS BY TEACHERS

Teachers were asked to respond to several items specific to the faculty role. Table XIV reports these data. The level of inter- and intra-departmental sharing was high and the majority of the faculty (70.3%) felt the staffing ratio (17.2:1) was correct for the school. The expectation for teaching 6 periods per day was agreed to by 54% of the faculty who responded. A majority of the faculty failed to agree that sufficient time for departmental planning or curriculum development existed at the school. A slight majority (51.3%) failed to agree that the seven percent salary differential was appropriate for their responsibility at the school.

Table XIV

Opinions by Teachers

	% Agree	% Uncertain	% Disagree
6 Periods of Teaching Reasonable Expectation	54.0	13.5	32.4
7% Salary Differential Appropriate	43.2	5.4	51.3
Science Lab Assistants Good Idea	75.6	18.9	5.4
Staffing Ratio is Correct	70.3	10.8	16.2
Sufficient Time for Departmental Planning	24.3	8.1	67.6
Sufficient Time for Curriculum Development	27.0	8.1	62.1
Sharing/Cooperation Intra-Departmental	81.0	2.7	13.5
Sharing/Cooperation Inter-Departmental	75.6	16.2	8.1

Note: Percentages may not total 100 because of invalid and/or blank responses.

TRANSPORTATION

A principal concern about a magnet school serving a large geographic area is the effect of travel time on the academic performance of students. The surveys demonstrated that parents and faculty felt travel time had not affected the academic performance of the students. However, students felt that it had. Confusion over this item may have existed because some students indicated that travel time had affected their performance but in a positive way by virtue of the fact that the long rides enabled them to discuss their assignments with their classmates. Table XV reports these data.

Table XV

Transportation

	Agree			Uncertain			Disagree		
	S	P	F	S	P	F	S	P	F
Travel Time Has Not Affected Academic Performance	35.9	64.1	59.4	21.4	12.7	24.3	42.4	22.6	16.2

* S = Students; P = Parents; F = Faculty

PARTICIPATION BY NON-FAIRFAX COUNTY STUDENTS

The school for science and technology serves five school jurisdictions other than Fairfax County Public Schools. Faculty were asked to consider several factors related to this participation by others in terms of being an asset, a detriment, or insignificant relative to the program.

In most instances the factors were considered insignificant by the majority of the faculty. The exceptions were geographic diversity, which was considered an asset, and travel time, which was split between categorization as a detriment and as insignificant. Table XVI reports these data.

Table XVI

Participation by Non-Fairfax County Students

	% of Faculty Categorizing As		
	Asset	Detriment	Insignificant
Geographic Diversity	59.5	2.7	35.1
Travel Time, Non-FCPS	0.0	45.9	48.6
Reducing Seats Available	10.8	8.1	67.6
Prior Academic Preparation	2.7	29.7	62.2
Academic Performance	5.4	8.1	81.1
Social Interaction	10.8	2.7	78.4
Academic Motivation	10.8	5.4	75.7

Note: Percentages may not total 100 because of invalid and/or blank responses.

ACHIEVEMENTS AND AWARDS

The 1985-86 session, the first year of operation of the Thomas Jefferson High School for Science and Technology, was a very successful one for the group of 382 freshmen and 92 seniors, who finished the year with many academic honors. Over 58% of the seniors ended their high school studies with GPA's in excess of 3.5; 7% of them had GPAs in excess of 4.0. Over 52% of the freshmen ended their first year of high school with GPAs in excess of 3.5% or higher; 9% of them had GPAs of 4.0

The seniors received $1,068,700 in academic scholarships and planned to attend 39 different colleges and universities across the country, including the Massachusettes Institute of Technology, Harvard, and Princeton in the east and the California Institute of Technology and the University of California at Berkley in the west. Twenty-six will attend Virginia Polytechnic Institute

and State University, and 13 will attend the University of Virginia. Approximately 17.4% of the seniors were National Merit winners; 16 were finalists and one was a semifinalist.

In science, the students excelled. There were five winners in the Virginia Science Talent Search and three winners in the Westinghouse Talent Search. One student placed first in chemistry in the Virginia Academy of Science competition. In the Junior Engineering Talent Search, there was a first place win in engineering graphics, a third in chemistry, and a third in physics.

The students also excelled in local, regional, and international levels of the annual science fairs. At the school level there were 280 entries; 40 of which qualified for entry at the regional level. At the regional level, the seniors had two first, five second, and three third places; one student went on to win second place in computer science at the international level. The freshmen won nine of 11 available first place awards at the regional science fair. One freshman won the grand prize at the regional and went on to place first in biochemistry at the international level.

In mathematics, the school for science and technology students also fared well. Seven seniors and one freshman scored in the top 2,000 of over 350,000 students in the U.S. and Canada on the prestigious American High School Mathematics Examination and were invited to compete in the American Invitational Mathematics Examination. The school's team placed sixth nationally in the Analysis Division of the National Math League, with a freshman placing sixth and a senior placing seventh in national individual ranking. The school's team placed sixth nationally in the Geometry Division of the National Math League with one freshman placing seventh and one freshman placing tenth in national individual ranking. In another national competition, SIGMA, the school for science and technology team placed third in national competition with two freshmen winning gold (top 1%), one freshman winning silver (top 2%), and one freshman winning bronze (top 3%) medals.

In the Virginia Mathematics League, the school's team placed fourth with one student in the top ten and one in the top twenty on state-wide individual rankings. The team placed third in another state competition, the VCTM-VCU Mathematics Contest. Individually in the VCTM-VCU competition, 21 students ranked in the top 20%, six were in the top 10 students statewide at their level of competition, and one freshman won first place statewide in his level of competition.

Locally, the school's mathematics team placed third in the Superintendent's Academic Awards Program and first in the Junior Mathematics League. In the latter competition, one freshman won first place countywide in individual rankings.

School for science and technology students also achieved well in academic activities in the humanities. In the first year at this new school, the students established five publications. In addition to the yearbook and newspaper, they published a newsletter, a literary journal, and a research journal. Five freshmen had articles published in national publications.

There were numerous awards for achievement in foreign language study. At the national level, 11 students won awards. They included a third and a fifth place in French; a first and a second place in Spanish; three gold and one silver in Latin; and 94th, 96th, and 97th percentile awards in German.

In music and in art, the students experienced success. Six students qualified for the regional orchestra, and one student won a gold key award in the metropolitan art competition.

The athletic program at Jefferson served both student bodies during 1985-86 - grade 9 and senior experience students of the school for science and technology and grades 10-12 of Jefferson High School. For the fall, winter, and spring programs, approximately 40% of the participants were school for science and technology students.

One freshman wrestler placed third in the region and fourth in the state in his weight class. Approximately one-third of the successful tennis teams (boys and girls) were school for science and technology students. The girls' tennis team won the district championship; the boys' team participated in the regional finals. Several freshmen won first place individual awards in district swim team competitions.

The freshman football team had a 4-3-1 season. The freshman basketball team ended the season with a 12-8 record. This team won the annual Jefferson Invitational Holiday Tournament, which was the first time a freshman Jefferson team had won.

Several faculty members were honored this year for their outstanding work with students. Three science teachers were commended by the Westinghouse Science Scholarship and Awards Division of the Annual Science Talent Search for meritorious work with science students. One faculty member was honored by the American Chemical Society Middle Atlantic Regional Award as the Outstanding Chemistry Teacher of the Year, and was named coach of the USA Olympiad Team in Chemistry which competes internationally. A member of the technology department was honored for her research and had a paper entitled "Chromosomal Locations of Members of a Family of Novel Endogenous Human Retroviral Genomes" published in the Journal of Virology.

APPENDIX A

FAIRFAX COUNTY
PUBLIC SCHOOLS

Department of Management Information Services

Wilton Woods Center
3701 Franconia Road
Alexandria, Virginia 22310

May 28, 1986

Dear Parent/Guardian

Attached you will find a copy of a Parent/Guardian Questionnaire developed to assist us in our assessment of the first year experience at our new Thomas Jefferson High School for Science and Technology. Although we have collected significant quantities of hard data (grades, travel time information, student awards, program statistics, etc.) we feel our analysis will be incomplete without having your opinions and perceptions considered.

Your responses are extremely important. Your active participation this school year has contributed to an exciting inaugural year. Would you please take the time to complete this survey? We appreciate your willingness to assist us.

Please note that we are requesting your completion of this form without consultation with your child. We ask that your responses be returned using the envelope provided no later than June 2, 1986.

Thank you again for your support of our efforts at Science and Technology.

Sincerely,

David E. Sawyer
Assistant Superintendent

DES/ke
Attachment

Fairfax County Public Schools
The Thomas Jefferson High School for Science and Technology
Parent/Guardian Questionnaire
(Freshman Students)

PURPOSE: This questionnaire is one of several techniques being used to gather data for a report on the first year of the Thomas Jefferson High School for Science and Technology. The report is required because of high community interest in the school, the school's visibility, and our commitment to review, analyze, and disseminate data on its programs and services.

It is important to recognize that the results of this survey not only will provide us with valuable planning data and other information for in-school use but also will be widely disseminated to public forums. Please take the time necessary to assure that your responses are carefully considered and accurately recorded.

Please complete this form without consultation with your child. Students are completing surveys specifically designed to capture their opinions and ideas. This survey is designed to solicit parental/guardian perceptions about the first year of the school's operation.

Thank you for your participation.

PART I DIRECTIONS: All answers are to be coded on the answer sheet provided. For each question, use a pencil to shade the letter on the answer sheet that corresponds to the letter next to your answer. Shade **ONLY** one answer for **EACH** question. Your responses will remain anonymous. **PLEASE DO NOT** put your name on **EITHER** the questionnaire **OR** the answer sheet.

1. Do you expect your child to return to Thomas Jefferson High School for Science and Technology next school year?

   A. Yes
   B. No
   C. Uncertain

2. In which school district do you reside?

   A. Fairfax County
   B. Manassas City
   C. Manassas Park City
   D. None of these

3. A. Prince William County
   B. Loudoun County
   C. Falls Church City
   D. None of these

For numbers 4 through 47, use the choices below to indicate how strongly you agree or disagree with each statement.

   A. Strongly Disagree
   B. Disagree
   C. Uncertain
   D. Agree
   E. Strongly Agree

4. The length of the school day is about right.

5. There are too many periods in the school day.

6. Teachers display genuine interest in their students.

7. The technology laboratory experiences have been important to the studies at TJHSST.

8. All classes should meet at least once every school day.

9. The activity period is a good requirement.

10. The activity period should continue to be restricted to the last period each day.

11. The graduation requirements (25 credits) are about right.

12. Enough time is included in the schedule for technology laboratory experiences.

13. Travel time **has not** affected my child's academic performance.

14. My child has been able to participate in extracurricular activities of his/her choice.

15. A strong academic climate exists at the school.

16. I believe that my child has been challenged by the coursework at the school.

17. My child looks forward to school each day.

18. Having a double period biology laboratory once weekly is a good idea.

19. Having a double period mathematics laboratory once weekly is a good idea.

20. Technology laboratory experiences appear to be directly related to the academic studies at the school.

21. Having students from several school systems attend the school is a good idea.

22. Class sizes appear to be about right.

23. If I had it to do over again, I would still agree to allow my child to come to S&T.

24. All things considered, I believe that my child's experience to date at S&T has been valuable.

25. Given what I now know, I would strongly encourage other parents to consider allowing their children to come to S&T.

26. This year has been exciting for me as a parent.

27. I feel that my child has been highly motivated to do his/her best academically.

28. I feel that my child was adequately prepared during earlier school years for the coursework required at TJHSST.

29. My child has been intellectually stimulated by the school's program.

30. My child has been regularly challenged by the curriculum.

31. My child has learned a lot this school year.

32. My child has adjusted well to the schedule.

33. I feel that my child has made satisfactory academic progress.

34. I have been comfortable with what the teacher's expect of my child.

35. I feel my child has met the school's requirements without undue frustration.

36. My child is enjoying the school's program.

37. I, as a parent, appreciate the TJHSST experience.

38. Students should be required to do a science research project at every grade level.

39. Independent research should be optional for students.

40. Students should be required to enter the school science fair.

41. There is enough time in the school day for friendships to develop.

42. There is enough time after school hours for homework assignments to be completed.

43. An atmosphere of sharing/cooperation exists between students at TJHSST.

44. Effective support and direction have been provided by the principal and other school administrators.

45. Effective instruction and support have been provided by the school's (TJHSST) teachers.

46. Effective programs and services have been provided by the guidance department.

47. Effective programs and services have been provided by the Office of Admissions and Program Planning.

For numbers 48 through 51, use the choices below to indicate which technology laboratory best fits the statement:

A. Computer Systems
B. Energy & Engineering
C. Life Sciences & Biotechnology
D. Materials Science
E. Telecommunications
F. TV Studio

48. For my child's career goals, the most appropriate technology laboratory is:

49. The technology laboratory that best supported my child's course work this school year was:

50. The technology laboratory experience my child seemed to enjoy the most was:

51. The technology laboratory experience my child seemed to enjoy the least was:

For numbers 52 through 62, use the choices below to indicate your opinion concerning graduation requirements and course offerings:

A. Be expanded
B. Be decreased
C. Remain the same

52. The number of elective courses from which to choose should:

53. The English requirement (4 credits) should:

54. The science requirement (4 credits) should:

55. The mathematics requirement (4 credits) should:

56. The foreign language requirement (3 credits) should:

57. The social studies requirement (3 credits) should:

58. The technology requirement (2 credits) should:

59. The fine arts requirement (1 credit) should:

60. The computer science requirement (1 credit) should:

61. The physical education requirement (2 credits) should:

62. Time for student activities during the school day should:

63. If given a choice about how the school day is organized, I would elect:

A. To stay with the current schedule
B. More periods, each of shorter duration
C. Less periods, each of longer duration
D. Longer periods some days, shorter periods other days
E. Some other arrangement

For numbers 64 through 74, use the four choices below to indicate how much, in your opinion, each statement represented a disadvantage to attending Thomas Jefferson High School for Science and Technology this school year.

A. A severe disadvantage
B. A slight disadvantage
C. Not a disadvantage
D. Not sure

64. The travel time from my neighborhood to the school in the morning.

65. The travel time from the school to home in the afternoon.

66. The number of elective courses from which to choose.

67. Having to leave friends at other schools.

68. Having to attend more classes each day.

69. Having to go to school for a longer day.

70. Having increased graduation requirements.

71. Having to attend classes in the technology laboratories.

72. Having to participate in an admissions process.

73. Having to participate in an activity period.

74. The time in the schedule for electives.

PART II DIRECTIONS: Using the form provided, please list those things you will remember most about this school year.

Your responses will assist in making future experiences at the school more relevant and more effective. Results will be made available when analyses have been completed.

PART II

Parent/Guardian Survey

The Thomas Jefferson High School for Science and Technology

Every student at the Thomas Jefferson High School for Science and Technology has participated in a "new" kind of experience this school year. Please complete this form indicating those experiences you feel best describe what you, as a parent/guardian, will remember about this school year. Think about the following as you provide your responses:

A. Classroom Activities/Coursework
B. Technology Laboratories
C. Field Trips and Other Outside Activities
D. Transportation
E. Student Activities

Description

1. _____
_____

2. _____
_____

3. _____
_____

4. _____
_____

5. _____
_____

6. _____
_____

7. _____
_____

8. _____
_____

9. _____
_____

10. _____
_____

11. _____
_____

12. _____
_____

(Please feel free to provide other comments on the back of this form that you feel will assist us in our efforts.)

Fairfax County Public Schools
Thomas Jefferson High School For Science and Technology
Faculty Questionnaire

PURPOSE: This questionnaire is a part of several data gathering techniques being used to develop a report on the first year of the Thomas Jefferson High School for Science and Technology. The report is required because of high community interest in the school, its visibility, and our commitment to review, analyze, and disseminate data on its programs and services.

It is important to recognize that the results of this survey not only will provide us with valuable planning data and other information for in-school use but also will be widely disseminated to public forums. Please take the time necessary to assure your responses are carefully considered and accurately recorded.

Thank you for your participation.

PART I DIRECTIONS: All answers are to be coded on the answer sheet provided. For each question, use a pencil to shade the letter on the answer sheet that corresponds to the letter next to your answer. Shade **ONLY** one answer for **EACH** question. Your responses will remain anonymous. **PLEASE DO NOT** put your name on **EITHER** the questionnaire **OR** the answer sheet.

1. To which department are you assigned?

   A. English
   B. Foreign Language
   C. Mathematics
   D. Science
   E. Social Studies

2. A. Technology
   B. Music
   C. Art
   D. Health/Physical Education
   E. Guidance

3. Immediately prior to joining the S&T faculty, I was an employee of:

   A. Another Fairfax County public school
   B. A non-Fairfax County public school
   C. A non-public (private or parochial) school
   D. Business/industry
   E. Other

4. Approximately what percentage of your classroom assignments were spent with 9th grade students during school year 1985-86?

   A. 0%
   B. 1-25%
   C. 26-50%
   D. 51-75%
   E. 75% or more

5. How many periods per day (of the 6 maximum) were you assigned to instructional duties other than the activity period?

A. 3
B. 4
C. 5
D. 6

For numbers 6 through 54, use the choices below to indicate how strongly you agree or disagree with each statement.

A. Strongly disagree
B. Disagree
C. Uncertain
D. Agree
E. Strongly agree

6. The IMPACT concept appears to be effective.

7. The longer school day (7 academic classes plus an activity period) is appropriate for students.

8. We should implement the standard six 55 minute period school day for all students.

9. Responsibility for six classes during eight periods daily is a reasonable expectation for teachers at the school.

10. The 7% salary differential is appropriate for the additional duty required.

11. The technology laboratory experiences are assets to my program.

12. All classes should meet at least once <u>every</u> school day.

13. The requirement for an activity period for all students is appropriate.

14. The activity period should continue to be restricted to the last period each day.

15. The graduation requirements are about right.

16. The admissions procedures used for 9th grade student selection appeared to have produced an appropriate student body.

17. Transportation problems have been insignificant relative to student performance.

18. Extracurricular activities have been available within reason to all students.

19. A strong academic emphasis is evident at the school.

20. The concept of blocking (taught back-to-back) math and science classes is a sound one.

21. The concept of blocking (taught back-to-back) social studies and English classes is a sound one.

22. The concept of a double regular science laboratory period once weekly is sound.

23. The concept of a double mathematics laboratory period once weekly is sound.

24. The amount of time scheduled for freshman technology laboratory experiences is about right.

25. Technology laboratory experiences should be directly related to specific instruction in mathematics or science.

26. The science laboratory teaching assistant position is an asset.

27. The staffing ratio for the school appears to be about right.

28. If I had it to do over again, I would still elect to join the S&T faculty.

29. All things considered, I believe that my experience to date at S&T has been valuable.

30. Given what I now know, I would strongly encourage other teachers to consider joining the S&T faculty.

31. This year has been professionally exciting.

32. Students are highly motivated to do their best academically.

33. Students are appropriately qualified for the coursework required.

34. Students are intellectually stimulated by the school's program.

35. Students are regularly challenged by the curriculum.

36. Students are progressing consistent with abilities.

37. Students have adjusted well to the schedule.

38. Students are making satisfactory academic progress.

39. Students are comfortable with faculty expectations.

40. Students are meeting requirements without undue frustration.

41. Students are enjoying the school's program.

42. Students are appreciating the experiences provided.

43. Students are willingly participating in the activities program.

44. Students should be required to do a science research project.

45. Independent research should be optional for students.

46. Students should be required to enter the school science fair.

47. Sufficient time is available for departmental planning.

48. Sufficient time is available for curriculum development.

49. An atmosphere of sharing/cooperation exists within my department.

50. An atmosphere of sharing/cooperation exists across departments.

51. Effective support and direction is provided by the central administrator responsible for the school's development (Assistant Superintendent, MIS).

52. Effective support and direction is provided by the school's (TJHSST) administrative personnel.

53. Effective programs and services are provided by the guidance department.

54. Effective programs and services are provided by the Office of Admissions and Program Planning.

For numbers 55 through 59, use the choices below to indicate your opinion relative to the continuation of selected responsibilities of department chairpersons.

A. Continued as is
B. Continued with increased responsibility
C. Continued with decreased responsibility
D. Discontinued

55. The faculty evaluation role of the department chair position should be:

56. The faculty supervision role of the department chair position should be:

57. The teaching assignments of the department chair position should be:

58. The curriculum development/decision responsibility of the department chair position should be:

59. The student activity assignments of the department chair position should be:

For numbers 60 through 65, use the choices below to indicate which technology laboratory best fits the statement:

A. Computer Systems
B. Energy & Engineering
C. Life Sciences & Biotechnology
D. Materials Science
E. Telecommunications

60. In my subject area, the technology laboratory most appropriate to support instruction is:

61. The technology laboratory that best exemplifies the philosophy and purpose of the laboratory facilities is:

62. The technology laboratory that least exemplifies the philosophy and purpose of the laboratory facilities is:

63. The most appropriate technology laboratory experience for freshmen was provided in:

64. The least appropriate technology laboratory experience for freshmen was provided in:

65. Students in my classes most frequently talk about or describe experiences they have had in:

For numbers 66 through 76, use the choices below to indicate your opinion concerning graduation requirements:

A. Be expanded
B. Be decreased
C. Remain the same

66. The availability of electives should:

67. The English requirement should:

68. The science requirement should:

69. The mathematics requirement should:

70. The foreign language requirement should:

71. The social studies requirement should:

72. The technology requirement should:

73. The fine arts requirement should:

74. The computer science requirement should:

75. The physical education requirement should:

76. The student activities period requirement should:

77. If given the choice relative to the organization of the school day, I would elect:

A. To stay with our current schedule
B. More periods, each of shorter duration
C. Less periods, each of longer duration
D. Longer periods some days, shorter periods other days
E. Some other arrangement

The Thomas Jefferson High School for Science and Technology is a regional school serving Loudoun County, Prince William County, Manassas City, Manassas Park City, and Falls Church City school divisions as well as Fairfax County public schools. For questions 78 through 84, use the choices below to evaluate various aspects of this regional status:

A. Appears to be an asset to the program.
B. Appears to be a detriment to the program.
C. Appears to be insignificant (having neither positive nor negative effects on the program).

78. The diversity of geographic distribution of the student body:

79. Travel time for students outside Fairfax County:

80. The reduction of seats available to any one jurisdiction by providing seats to other jurisdictions:

81. Distinctions evident between student populations relative to prior academic preparation:

82. Distinctions evident between student populations relative to academic performance:

83. Distinctions evident between student populations relative to social interaction:

84. Distinctions evident between student populations relative to academic motivation:

PART II DIRECTIONS: Using the form provided, please list your use of the per diem employment extension for faculty this academic year.

PART III DIRECTIONS: Using the form provided, please indicate your employment status immediately prior to joining the S&T faculty.

Please provide any other comments you deem appropriate for this data collection exercise using the balance of the space available on the Part III form.

Your responses will assist in making future experiences at the school more relevant and more effective. Results will be made available when analyses have been completed. Congratulations for your accomplishments during the school's inaugural year!

PART II
Faculty Survey
The Thomas Jefferson High School for Science and Technology
Per Diem Employment Extension
School Year 1985-86

Each faculty member at the Thomas Jefferson High School for Science and Technology is eligible to receive additional per diem employment of 20 days per academic year. Please complete this form indicating the number of days used OR planned for use and describe your activities to the degree possible; please list these activities in order of occurrence. Please use the following descriptions to categorize your responses:

A. Inservice Activities/Faculty Training/Professional Development
B. Curriculum Planning/Course Development
C. Classroom/Facility Preparation
D. Supply/Material/Equipment Identification/Specification/Acquisition
E. Other

Day	Category	Description
1	___	_____
2	___	_____
3	___	_____
4	___	_____
5	___	_____
6	___	_____
7	___	_____
8	___	_____
9	___	_____
10	___	_____
11	___	_____
12	___	_____
13	___	_____
14	___	_____
15	___	_____
16	___	_____
17	___	_____
18	___	_____
19	___	_____
20	___	_____

PART III

Faculty Survey
Thomas Jefferson High School for Science and Technology

Prior Assignment Identification
School Year 1985-86

Please identify the position held, school assigned (if applicable), and employer for the assignment you held immediately prior to joining the S&T faculty.

Position	School	Employer
If teacher, please indicate grade level(s) and subject(s).	(If applicable)	

- - - -

Fairfax County Public Schools
The Thomas Jefferson High School for Science and Technology
Senior Student Questionnaire

PURPOSE: This questionnaire is one of several techniques used to gather data for a report on the first year of the Thomas Jefferson High School for Science and Technology. The report is required because of high community interest in the school, the school's visibility, and our commitment to review, analyze, and disseminate data on its programs and services.

It is important to recognize that the results of this survey not only will provide us with valuable planning data and other information for in-school use but also will be widely disseminated to public forums. Please take the time necessary to assure that your responses are carefully considered and accurately recorded.

Thank you for your participation.

PART I DIRECTIONS: All answers are to be coded on the answer sheet provided. For each question, use a pencil to shade the letter on the answer sheet that corresponds to the letter next to your answer. Shade **ONLY** one answer for **EACH** question. Your responses will remain anonymous. **PLEASE DO NOT** put your name on **EITHER** the questionnaire **OR** the answer sheet.

1. Are you male or female?

   A. Male
   B. Female

2. Which category would you use to describe yourself?

   A. White
   B. Black
   C. Hispanic
   D. American Indian
   E. Asian or Pacific Islander

3. In which school district do you reside?

   A. Fairfax County
   B. Manassas City
   C. Manassas Park City
   D. None of these

4. A. Prince William County
   B. Loudoun County
   C. Falls Church City
   D. None of these

5. For how many credits did you enroll this school year?

   A. 5
   B. 6
   C. 7
   D. 8

For numbers 6 through 42, use the choices below to indicate how strongly you agree or disagree with each statement.

A. Strongly Disagree
B. Disagree
C. Uncertain
D. Agree
E. Strongly Agree

6. Teachers display genuine interest in their students.

7. The technology laboratory experiences are important to my studies at TJHSST.

8. Enough time is included in the schedule for technology laboratory experiences.

9. Travel time **has not** affected my academic performance.

10. I have been able to participate in extracurricular activities of my choice.

11. A strong academic climate exists at the school.

12. I feel challenged by the coursework at the school.

13. I look forward to school each day.

14. Having a double period biology laboratory once weekly is a good idea.

15. Having a double period mathematics laboratory once weekly is a good idea.

16. The amount of time scheduled for technology laboratory experiences is about right.

17. Technology laboratory experiences are directly related to my other studies at the school.

18. Having students from several school systems attend the school is a good idea.

19. Class sizes appear to be about right.

20. If I had it to do over again, I would still elect to come to S&T.

21. All things considered, I believe that my experience to date at S&T has been valuable.

22. Given what I now know, I would strongly encourage other students to consider coming to S&T.

23. This year has been exciting.

24. I have been highly motivated to do my best academically.

25. I feel that I was adequately prepared during earlier school years for the coursework required at TJHSST.

26. I have been intellectually stimulated by the school's program.

27. I have been regularly challenged by the curriculum.

28. I feel that I have learned a lot this school year.

29. I have adjusted well to the schedule.

30. I feel that I have made satisfactory academic progress.

31. I have been comfortable with what the teacher's expect of me in my classes.

32. I feel I have met the school's requirements without undue frustration.

33. I am enjoying the school's program.

34. I appreciate the TJHSST experience.

35. Independent research should be optional for students.

36. There is enough time in the school day for friendships to develop.

37. There is enough time after school hours for homework assignments to be completed.

38. An atmosphere of sharing/cooperation exists between students at TJHSST.

39. Effective support and direction have been provided by the principal and other school administrators.

40. Effective instruction and support have been provided by the school's (TJHSST) teachers.

41. Effective programs and services have been provided by the guidance department.

42. Effective programs and services have been provided by the Office of Admissions and Program Planning.

For numbers 43 through 46, use the choices below to indicate which technology laboratory best fits the statement:

A. Computer Systems
B. Energy & Engineering
C. Life Sciences & Biotechnology
D. Materials Science
E. Telecommunications
F. TV Studio

43. For my career goals, the <u>most</u> appropriate technology laboratory is:

44. The technology laboratory that <u>best</u> supported my course work this school year was:

45. The technology laboratory experience I enjoyed the most was:

46. The technology laboratory experience I enjoyed the least was:

For numbers 47 through 55, use the four choices below to indicate how much, in your opinion, each statement represented a <u>disadvantage</u> to attending Thomas Jefferson High School for Science and Technology this school year.

A. A severe disadvantage
B. A slight disadvantage
C. Not a disadvantage
D. Not sure

47. The travel time from my neighborhood to the school in the morning.

48. The travel time from the school to home in the afternoon.

49. The number of elective courses from which to choose.

50. Having to leave my friends at my other school.

51. Having to attend more classes each day.

52. Having to go to school for a longer day.

53. Having to attend classes in the technology laboratories.

54. Having to participate in an admissions process.

55. The time in my schedule for electives.

PART II DIRECTIONS: Using the form provided, please list those things you will remember most about this school year.

PART III DIRECTIONS: Using the form provided, please indicate which school you attended immediately prior to coming to S&T.

Your responses will assist in making future experiences at the school more relevant and more effective. Results will be made available when analyses have been completed.

Congratulations on your accomplishments during the school's inaugural year!

PART II

Senior Student Survey

The Thomas Jefferson High School for Science and Technology

Every student at the Thomas Jefferson High School for Science and Technology has participated in a "new" kind of experience this school year. Please complete this form indicating those experiences you feel best describe what you will remember about this school year. Think about the following as you provide your responses:

A. Classroom Activities/Coursework
B. Technology Laboratories
C. Field Trips and Other Outside Activities
D. Transportation
E. Student Activities

Description

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12. _____
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PART III

Senior Student Survey
Thomas Jefferson High School for Science and Technology

Prior Attendance Identification

Please identify the school you attended immediately prior to coming to S&T.

School Name Location

- - - -

Fairfax County Public Schools
The Thomas Jefferson High School for Science and Technology
Freshman Student Questionnaire

PURPOSE: This questionnaire is one of several data gathering techniques used to gather data for a report on the first year of the Thomas Jefferson High School for Science and Technology. The report is required because of high community interest in the school, the school's visibility, and our commitment to review, analyze, and disseminate data on its programs and services.

It is important to recognize that the results of this survey not only will provide us with valuable planning data and other information for in-school use but also will be widely disseminated to public forums. Please take the time necessary to assure that your responses are carefully considered and accurately recorded.

Thank you for your participation.

PART I DIRECTIONS: All answers are to be coded on the answer sheet provided. For each question, use a pencil to shade the letter on the answer sheet that corresponds to the letter next to your answer. Shade **ONLY** one answer for **EACH** question. Your responses will remain anonymous. **PLEASE DO NOT** put your name on **EITHER** the questionnaire **OR** the answer sheet.

1. Do you expect to return to Thomas Jefferson High School for Science and Technology next school year?

   A. Yes
   B. No
   C. Uncertain

2. Are you male or female?

   A. Male
   B. Female

3. Which category would you use to describe yourself?

   A. White
   B. Black
   C. Hispanic
   D. American Indian
   E. Asian or Pacific Islander

4. In which school district do you reside?

   A. Fairfax County
   B. Manassas City
   C. Manassas Park City
   D. None of these

5. A. Prince William County
   B. Loudoun County
   C. Falls Church City
   D. None of these

6. For how many credits did you enroll this school year?

A. 5
B. 6
C. 7
D. 8

For numbers 7 through 53, use the choices below to indicate how strongly you agree or disagree with each statement.

A. Strongly Disagree
B. Disagree
C. Uncertain
D. Agree
E. Strongly Agree

7. The IMPACT program is working well.

8. The length of the school day is about right.

9. There are too many periods in the school day.

10. Teachers display genuine interest in their students.

11. The technology laboratory experiences are important to my studies at TJHSST.

12. All classes should meet at least once <u>every</u> school day.

13. The activity period is a good requirement.

14. The activity period should continue to be restricted to the last period each day.

15. The graduation requirements (25 credits) are about right.

16. Enough time is included in the schedule for technology laboratory experiences.

17. Travel time **has not** affected my academic performance.

18. I have been able to participate in extracurricular activities of my choice.

19. A strong academic climate exists at the school.

20. I feel challenged by the coursework at the school.

21. I look forward to school each day.

22. Having a double period biology laboratory once weekly is a good idea.

23. Having a double period mathematics laboratory once weekly is a good idea.

24. The amount of time scheduled for technology laboratory experiences is about right.

25. Technology laboratory experiences are directly related to my other studies at the school.

26. Having students from several school systems attend the school is a good idea.

27. Class sizes appear to be about right.

28. If I had it to do over again, I would still elect to come to S&T.

29. All things considered, I believe that my experience to date at S&T has been valuable.

30. Given what I now know, I would strongly encourage other students to consider coming to S&T.

31. This year has been exciting.

32. I have been highly motivated to do my best academically.

33. I feel that I was adequately prepared during earlier school years for the coursework required at TJHSST.

34. I have been intellectually stimulated by the school's program.

35. I have been regularly challenged by the curriculum.

36. I feel that I have learned a lot this school year.

37. I have adjusted well to the schedule.

38. I feel that I have made satisfactory academic progress.

39. I have been comfortable with what the teacher's expect of me in my classes.

40. I feel I have met the school's requirements without undue frustration.

41. I am enjoying the school's program.

42. I appreciate the TJHSST experience.

43. I have willingly participated in the activities program.

44. Students should be required to do a science research project at every grade level.

45. Independent research should be optional for students.

46. Students should be required to enter the school science fair.

47. There is enough time in the school day for friendships to develop.

48. There is enough time after school hours for homework assignments to be completed.

49. An atmosphere of sharing/cooperation exists between students at TJHSST.

50. Effective support and direction have been provided by the principal and other school administrators.

51. Effective instruction and support have been provided by the school's (TJHSST) teachers.

52. Effective programs and services have been provided by the guidance department.

53. Effective programs and services have been provided by the Office of Admissions and Program Planning.

For numbers 54 through 57, use the choices below to indicate which technology laboratory best fits the statement:

A. Computer Systems
B. Energy & Engineering
C. Life Sciences & Biotechnology
D. Materials Science
E. Telecommunications
F. TV Studio

54. For my career goals, the <u>most</u> appropriate technology laboratory is:

55. The technology laboratory that <u>best</u> supported my course work this school year was:

56. The technology laboratory experience I enjoyed the most was:

57. The technology laboratory experience I enjoyed the least was:

For numbers 58 through 69, use the choices below to indicate your opinion concerning graduation requirements and course offerings:

A. Be expanded
B. Be decreased
C. Remain the same

58. The number of elective courses from which to choose should:

59. The English requirement (4 credits) should:

60. The science requirement (4 credits) should:

61. The mathematics requirement (4 credits) should:

62. The foreign language requirement (3 credits) should:

63. The social studies requirement (3 credits) should:

64. The technology requirement (2 credits) should:

65. The fine arts requirement (1 credit) should:

66. The computer science requirement (1 credit) should:

67. The physical education requirement (2 credits) should:

68. Time for student activities during the school day should:

69. If given a choice about how the school day is organized, I would elect:

    A. To stay with the current schedule
    B. More periods, each of shorter duration
    C. Less periods, each of longer duration
    D. Longer periods some days, shorter periods other days
    E. Some other arrangement

For numbers 70 through 80, use the four choices below to indicate how much, in your opinion, each statement represented a <u>disadvantage</u> to attending Thomas Jefferson High School for Science and Technology this school year.

    A. A severe disadvantage
    B. A slight disadvantage
    C. Not a disadvantage
    D. Not sure

70. The travel time from my neighborhood to the school in the morning.

71. The travel time from the school to home in the afternoon.

72. The number of elective courses from which to choose.

73. Having to leave my friends at my other school.

74. Having to attend more classes each day.

75. Having to go to school for a longer day.

76. Having increased graduation requirements.

77. Having to attend classes in the technology laboratories.

78. Having to participate in an admissions process.

79. Having to participate in an activity period.

80. The time in my schedule for electives.

PART II DIRECTIONS: Using the form provided, please list those things you will remember most about this school year.

PART III DIRECTIONS: Using the form provided, please indicate which school you attended immediately prior to coming to S&T.

Your responses will assist in making future experiences at the school more relevant and more effective. Results will be made available when analyses have been completed.

Congratulations on your accomplishments during the school's inaugural year!

PART II
Freshman Student Survey
The Thomas Jefferson High School for Science and Technology

Every student at the Thomas Jefferson High School for Science and Technology has participated in a "new" kind of experience this school year. Please complete this form indicating those experiences you feel best describe what you will remember about this school year. Think about the following as you provide your responses:

A. Classroom Activities/Coursework
B. Technology Laboratories
C. Field Trips and Other Outside Activities
D. Transportation
E. Student Activities

Description

1. _____
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2. _____
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3. _____
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PART III

Freshman Student Survey
Thomas Jefferson High School for Science and Technology

Prior Attendance Identification

Please identify the school you attended immediately prior to coming to S&T.

School Name Location

- - - -